

**What is claimed is:**

1           1. A stator for a motor comprising:  
2           a core having a hollow portion and a plurality of tooth  
3 portions protruding from the hollow portion in a radial  
4 manner;  
5           a plurality of insulators, corresponding to the tooth  
6 portions, disposed around the corresponding tooth portion  
7 respectively;  
8           a plurality of windings, corresponding to the insulators,  
9 disposed around the corresponding insulator respectively;  
10          and  
11          a plurality of back-iron portions surrounding the core  
12 and contacting the insulators along a direction opposite to  
13 the protruding direction of the tooth portions.

1           2. The stator as claimed in claim 1, wherein the  
2 back-iron portions are connected with each other by welding.

1           3. The stator as claimed in claim 1, wherein the  
2 back-iron portions are connected with each other by adhesion.

1           4. The stator as claimed in claim 1, wherein each of the  
2 back-iron portions is provided with a recessed portion and  
3 a projecting portion, whereby the back-iron portions are  
4 connected with each other by the engagement between the  
5 recessed portion and the projecting portion.

1           5. The stator as claimed in claim 1, further comprising:  
2           a restricting portion surrounding the back-iron  
3 portions so that the back-iron portions contact each other  
4 around the core.

1           6. The stator as claimed in claim 1, wherein the core

2 is magnetic material.

1 7. The stator as claimed in claim 1, wherein the  
2 back-iron portions are magnetic material.

1 8. A stator for a motor comprising:  
2 a core having a hollow portion and a plurality of tooth  
3 portions protruding from the hollow portion in a radial manner;  
4 and  
5 a plurality of back-iron portions surrounding the core  
6 and contacting the tooth portions along a direction opposite  
7 to the protruding direction of the tooth portions.

1 9. The stator as claimed in claim 8, wherein the  
2 back-iron portions are connected with each other by welding.

1 10. The stator as claimed in claim 8, wherein the  
2 back-iron portions are connected with each other by adhesion.

1 11. The stator as claimed in claim 8, wherein each of  
2 the back-iron portions is provided with a recessed portion  
3 and a projecting portion, whereby the back-iron portions are  
4 connected with each other by the engagement between the  
5 recessed portion and the projecting portion.

1 12. The stator as claimed in claim 8, further comprising:  
2 a restricting portion surrounding the back-iron  
3 portions so that the back-iron portions contact each other  
4 around the core.

1 13. The stator as claimed in claim 8, wherein the core  
2 is magnetic material.

1           14. The stator as claimed in claim 8, wherein the  
2           back-iron portions are magnetic material.